

City of Sunnyvale
Ten Year Project Costs
by Project Category and Type

Project Number	Project Name	Prior Years Actual	Revised Budget 2005-06	Plan 2006-07	Plan 2007-08	Plan 2008-09	Plan 2009-10	Plan 2010-11	Plan 2011-12	Plan 2012-13	Plan 2013-14	Plan 2014-15	Plan 2015-16	Ten Year Plan Total	Project Grand Total
Category: Special Type: Sanitary Sewer															
822560	Energy Use Audit-Hot Water Loop Replacement	3,693	371,307	0	0	0	0	0	0	0	0	0	0	0	375,000
823140	Structural and Infrastructure Assessment at WPCP	72,296	57,125	0	0	0	0	0	0	0	0	0	0	0	129,421
823220	Wastewater Data/Process/Service Assessment Studies	91,823	289,452	0	0	0	0	0	0	0	0	0	0	0	381,275
824340	Wastewater Cost of Service Study	4,095	38,345	0	0	0	51,228	0	0	0	0	57,045	0	108,273	150,713
825100	Solids Handling Safety and Efficiency Improvements - Phase I	0	250,000	0	0	0	0	0	0	0	0	0	0	0	250,000
825960	SCVURPPP Contracting and Fiscal Agent	0	47,527	48,048	49,009	50,359	51,749	53,176	54,645	56,155	57,707	59,304	61,083	541,235	588,762
Total		171,907	1,053,756	48,048	49,009	50,359	102,977	53,176	54,645	56,155	57,707	116,349	61,083	649,508	1,875,171

Note: Projects with \$0 Grand Total have budgets in the second ten years of the Twenty Year Plan.

Project Information Sheet

Project: 822560 Energy Use Audit-Hot Water Loop Replacement

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2001-02	Phase:	Ongoing	Project Manager:	Hira Raina
Planned Completion Year:	2004-05	% Complete:	n/a	Project Coordinator:	Dan Hammons
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.3C	Fund:	455 Utilities
Sub-Element:	3.3 Sanitary Sewer System	Neighborhood:	City Wide	Sub-Fund:	300 Wastewater Management

Project Description and Statement of Need

The Water Pollution Control Plant (WPCP) generates electric power from methane gas produced at the landfill and in the water and wastewater treatment process. A by-product of power generation is heat, which is transferred via a hot water loop to other areas of the WPCP to heat buildings and for other uses. The hot water loop is nearing the end of its useful life, with expensive replacement costs already incurred for just a small portion of the system. The high cost of replacement dictated exploring options other than just replacing with a similar system.

This project will provide a comprehensive evaluation of how heat is generated, utilized, and dissipated throughout the WPCP. It will determine whether it would be more cost-effective to replace the hot water loop in kind or to construct a different system for heat dissipation for the engines and heating of the buildings. The project will also include preliminary engineering design work which will yield detailed information regarding the scope and anticipated construction costs for the preferred alternative. This information will be used to develop a new construction project for the identified alternative which will be submitted as part of the next CIP budget cycle.

Service Level

none

Issues

NOTE: \$300,000 budgeted for FY 04-05 to be carried over to FY 05-06.

Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
Project Costs	3,693	371,307	0	0	0	0	0	0	0	0	0	0	0	375,000
Revenues														
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfers-In														
Fund Reserves		0	0	0	0	0	0	0	0	0	0	0	0	
Total	3,693	371,307	0	0	0	0	0	0	0	0	0	0	0	375,000
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 823140 Structural and Infrastructure Assessment at WPCP

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2001-02	Phase:	Implementation	Project Manager:	Lorrie Gervin
Planned Completion Year:	2003-04	% Complete:	50	Project Coordinator:	none
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.3C	Fund:	455 Utilities
Sub-Element:	3.3 Sanitary Sewer System	Neighborhood:	City Wide	Sub-Fund:	300 Wastewater Management

Project Description and Statement of Need

The infrastructure needs of the Water Pollution Control Plant (WPCP) are not yet fully funded. This project provides an inventory of infrastructure as well as condition assessment to determine remaining useful life and replacement costs and to identify immediate structural rehabilitation needs.

Service Level

no service level effect

Issues

none

Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
Project Costs	72,296	57,125	0	0	0	0	0	0	0	0	0	0	0	129,421
Revenues														
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfers-In														
Fund Reserves		0	0	0	0	0	0	0	0	0	0	0	0	
Total	72,296	57,125	0	0	0	0	0	0	0	0	0	0	0	129,421
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 823220 Wastewater Data/Process/Service Assessment Studies

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2001-02	Phase:	Ongoing	Project Manager:	Lorrie Gervin
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	none
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.3C	Fund:	455 Utilities
Sub-Element:	3.3 Sanitary Sewer System	Neighborhood:	City Wide	Sub-Fund:	300 Wastewater Management

Project Description and Statement of Need

This project will fund various wastewater studies at the Water Pollution Control Plant (WPCP) over a ten-year period. These studies include the following:

WPCP Data Records Management - The WPCP data management systems and Support Services reporting needs, shall be addressed. Consideration of long-term maintenance of the system, including upgrade requirements and scheduling will, be part of the project.

Plant Process Assessment - This project involves a process engineering evaluation to examine WPCP treatment processes for sustainability, cost-effectiveness, and efficiency.

Laboratory Service Study/Market Analysis - Environmental lab service enhancements and cost efficiencies can be made by increasing the lab's ability to incorporate replacement equipment, methods, and procedures. These improvements will greatly enhance the lab's ability to bring in-house work currently contracted out when it is more cost effective to do so, and vice-versa.

Combine scope statement of need from 802951 to this project as well.

Service Level

no service level effect

Issues

none

Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
Project Costs	91,823	289,452	0	0	0	0	0	0	0	0	0	0	0	381,275
Revenues														
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfers-In														
Fund Reserves		0	0	0	0	0	0	0	0	0	0	0	0	
Total	91,823	289,452	0	0	0	0	0	0	0	0	0	0	0	381,275
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 824340 Wastewater Cost of Service Study

Category:	Special	Type:	Sanitary Sewer	Department:	Finance
Origination Year:	2002-03	Phase:	Ongoing	Project Manager:	Tim Kirby
Planned Completion Year:	2004-05	% Complete:	n/a	Project Coordinator:	Kristy McCumby
Origin:	Staff			Interdependencies:	Public Works
Element:	3 Environmental Management	Goal:	3.3D	Fund:	455 Utilities
Sub-Element:	3.3 Sanitary Sewer System	Neighborhood:	City Wide	Sub-Fund:	300 Wastewater Management

Project Description and Statement of Need

Every four years, the Utilities Division in the Department of Finance performs a cost of service study on the wastewater system to reallocate the costs of the City's wastewater services among the various customer classes, based on their use of each service. Staff works with a consultant to develop a cost of service model or update an existing model with current data. The study generates a cost of service for each customer class and recommends adjustments to the rate structure to ensure costs are recovered on an equitable basis from the different customer classes.

Service Level

none

Issues

none

Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
Project Costs	4,095	38,345	0	0	0	51,228	0	0	0	0	57,045	0	108,273	150,713
Revenues														
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfers-In														
Fund Reserves		0	0	0	0	51,228	0	0	0	0	57,045	0	108,273	
Total	4,095	38,345	0	0	0	51,228	0	0	0	0	57,045	0	108,273	150,713
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 825100 Solids Handling Safety and Efficiency Improvements - Phase I

Category:	Special	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2003-04	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2005-06	% Complete:	0	Project Coordinator:	John Addeo
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.3C	Fund:	455 Utilities
Sub-Element:	3.3 Sanitary Sewer System	Neighborhood:	City Wide	Sub-Fund:	300 Wastewater Management

Project Description and Statement of Need

A 50% increase in solids delivered to the Water Pollution Control Plant (WPCP) digesters and subsequently transferred to the dewatering facility will occur upon completion of project #812750, WPCP Energy Improvements, in FY 04/05. The Energy Improvement project is needed to offset the decline in landfill gas production by routing additional treatment plant solids to the digesters and thereby increasing methane production in the digesters. Routing additional solids to the digesters will also decrease solids to the ponds which then require expensive removal.

Handling this increased volume of solids will place added stress on the existing solids handling system and may lead to unsafe and dangerous conditions by overloading staff and equipment trying to meet process goals. Phase I of this project will be a review of mechanical and staffing needs to provide the safest and most cost-effective solids handling. It will result in recommendations for materials handling equipment and staffing to increase the throughput of solids from the dewatering filtration beds to the sludge drying area. Phase II of this project will be a construction contract for the implementation of the recommended solution. Phase II will be identified in a subsequent budget cycle when costs can be better defined. Construction costs will be a one-time expenditure. Operating cost increases may be needed but will be offset by savings in energy costs due to declining landfill gas production and costs for solids removal from the oxidation ponds. The expected life of new facilities is unknown at this time because this type of facility has not yet been identified.

Service Level

Service Delivery Plan (SDP) 34206 - Recycling and Reuse of Plant Process By-Products requires recovering the maximum amount of solids processed at dewatering for beneficial reuse.

Issues

No issues.

Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
Project Costs	0	250,000	0	0	0	0	0	0	0	0	0	0	0	250,000
Revenues														
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfers-In														
Total	0	250,000	0	0	0	0	0	0	0	0	0	0	0	250,000
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Project Information Sheet

Project: 825960 SCVURPPP Contracting and Fiscal Agent

Category:	Special	Type:	Sanitary Sewer	Department:	Finance
Origination Year:	2004-05	Phase:	Ongoing	Project Manager:	Lorrie Gervin
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	Tim Kirby
Origin:	Staff			Interdependencies:	Public Works
Element:	3 Environmental Management	Goal:	3.4A	Fund:	455 Utilities
Sub-Element:	3.4 Surface Runoff	Neighborhood:	City Wide	Sub-Fund:	300 Wastewater Management

Project Description and Statement of Need

The City of Sunnyvale is one of 15 members of the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP). SCVURPPP was formed to implement the National Pollution Discharge Elimination Permit (NPDES) issued to the cities, county, and Santa Clara Valley Water District who discharge storm water to the San Francisco Bay. These 15 agencies have signed a Memorandum of Agreement (MOA) and pay annual assessments to cover the cost of programmatic activities related to implementing the NPDES Permit.

The MOA provides for the selection of one of the members as the Program's Contracting and Fiscal Agent. The City of Sunnyvale has been selected as the program's Contracting and Fiscal Agent. The Contracting and Fiscal Agent provides billing and payment services for SCVURPPP, and acts as the awarding authority for any contracts that the agency wishes to enter into. This project is fully funded by SCVURPPP Assessments.

Service Level

none

Issues

none

Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
Project Costs	0	47,527	48,048	49,009	50,359	51,749	53,176	54,645	56,155	57,707	59,304	61,083	541,235	588,762
Revenues														
Other Agencies-Reimbursement		0	48,048	49,009	50,359	51,749	53,176	54,645	56,155	57,707	59,304	61,083	541,235	
Total	0	47,527	48,048	49,009	50,359	51,749	53,176	54,645	56,155	57,707	59,304	61,083	541,235	588,762
Transfers-In														
General Fund - General		0	0	0	0	0	0	0	0	0	0	0	0	
Fund Reserves		0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operating Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0